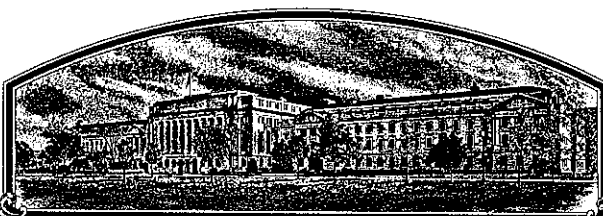


No.

8700159



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

**Northrup King Co.**

Whereas, THERE HAS BEEN PRESENTED TO THE  
**Secretary of Agriculture**

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF *eighteen* \* YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. UNITED STATES SEED OF THIS VARIETY (1) SHALL BE SOLD BY VARIETY NAME ONLY AS SEED OF CERTIFIED SEED AND (2) SHALL CONFORM TO THE NUMBER OF GENERATIONS REQUIRED BY THE OWNER OF THE RIGHTS. (34 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

WHEAT

'Coker 9733'

AMENDED CERTIFICATE

*\*Original grant January 31, 1989  
In Testimony Whereof, I have hereunto set  
my hand and caused the seal of the Plant  
Variety Protection Office to be affixed  
at the City of Washington, D. C.  
this 31st day of August in  
the year of our Lord one thousand nine  
hundred and eighty-nine.*

Attest:

*Kenneth D. Evans*  
Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

*Clayton C. Gentry*  
Secretary of Agriculture

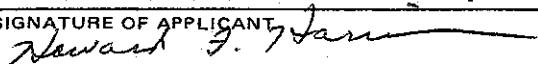
U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE

FORM APPROVED: OMB NO. 0581-0055

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2426).

## APPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE

(Instructions on reverse)

1. NAME OF APPLICANT(S) <b>NORTHROP KING CO.</b> <del>Coker's Pedigreed Seed Company</del>		2. TEMPORARY DESIGNATION Coker 84-33		3. VARIETY NAME Coker '9733'	
4. ADDRESS (Street and No. or R.F.D. No., City, State, and Zip Code) P.O. Box 340 959 <del>Hartsville, South Carolina 29550</del> <b>MINNEAPOLIS, MN 55440</b>		5. PHONE (Include area code) <del>(612) 593-7335</del> <b>803-332-7531</b>		FOR OFFICIAL USE ONLY VPPO NUMBER 8700159	
6. GENUS AND SPECIES NAME  Triticum Aestivum		7. FAMILY NAME (Botanical)  Gramineae		FILING DATE July 16, 1987 TIME 7:30 <input type="checkbox"/> A.M. <input checked="" type="checkbox"/> P.M.	
8. KIND NAME  Wheat		9. DATE OF DETERMINATION  August 1986		FEES RECEIVED AMOUNT FOR FILING \$ 1800.00 DATE July 16, 1987 AMOUNT FOR CERTIFICATE \$ 200.00 DATE October 27, 1988	
10. IF THE APPLICANT NAMED IS NOT A "PERSON," GIVE FORM OF ORGANIZATION (Corporation, partnership, association, etc.)  Corporation				12. DATE OF INCORPORATION <del>July 12, 1918</del> 1976	
11. IF INCORPORATED, GIVE STATE OF INCORPORATION <del>South Carolina</del> DELAWARE					
13. NAME AND ADDRESS OF APPLICANT REPRESENTATIVE(S), IF ANY, TO SERVE IN THIS APPLICATION AND RECEIVE ALL PAPERS <del>Howard F. Harrison</del> ROBERT W. ROMIG <del>Coker's Pedigreed Seed Company</del> NORTHROP KING CO. <del>P.O. Box 340</del> P.O. Box 959 <del>Hartsville, South Carolina 29550</del> MINNEAPOLIS, MN 55440 PHONE (Include area code): <del>(803) 332-7531</del> (612) 593-7305					
14. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED					
a. <input checked="" type="checkbox"/> Exhibit A, Origin and Breeding History of the Variety (See Section 52 of the Plant Variety Protection Act.)					
b. <input checked="" type="checkbox"/> Exhibit B, Novelty Statement.					
c. <input checked="" type="checkbox"/> Exhibit C, Objective Description of Variety (Request form from Plant Variety Protection Office.)					
d. <input checked="" type="checkbox"/> Exhibit D, Additional Description of Variety.					
e. <input checked="" type="checkbox"/> Exhibit E, Statement of the Basis of Applicant's Ownership.					
15. DOES THE APPLICANT(S) SPECIFY THAT SEED OF THIS VARIETY BE SOLD BY VARIETY NAME ONLY AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act.) <input checked="" type="checkbox"/> Yes (If "Yes," answer items 16 and 17 below) <input checked="" type="checkbox"/> No					
16. DOES THE APPLICANT(S) SPECIFY THAT THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No			17. IF "YES" TO ITEM 16, WHICH CLASSES OF PRODUCTION BEYOND BREEDER SEED? <input checked="" type="checkbox"/> Foundation <input checked="" type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified		
18. DID THE APPLICANT(S) PREVIOUSLY FILE FOR PROTECTION OF THE VARIETY IN THE U.S.? <input type="checkbox"/> Yes (If "Yes," give date) <input checked="" type="checkbox"/> No					
19. HAS THE VARIETY BEEN RELEASED, OFFERED FOR SALE, OR MARKETING IN THE U.S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> Yes (If "Yes," give names of countries and dates) <input type="checkbox"/> No					
USA, October 1986					
20. The applicant(s) declare(s) that a viable sample of basic seeds of this variety will be furnished with the application and will be replenished upon request in accordance with such regulations as may be applicable. The undersigned applicant(s) is (are) the owner(s) of this sexually reproduced novel plant variety, and believe(s) that the variety is distinct, uniform, and stable as required in Section 41, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act. Applicant(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.					
SIGNATURE OF APPLICANT  Howard F. Harrison				DATE 5-13, 1987	
SIGNATURE OF APPLICANT				DATE	

(Coker '9733') Wheat

EXHIBIT A

Origin and Breeding History of the Variety

1971-72	Cross No. x911: Coker 71-21/BbII//Atr. 71
1972-73	F1 Plants
1973-74	F2 Spaced Plants
1974-75	F3 Headrows
1975-76	F4 Headrows
1976	F5 Summer Greenhouse Bulk
1976-77	F6 Spaced Plants
1977-78	F7 Headrows
1978-79	F8 Headrows
1979-80	F9 Headrows
1980-81	F10 Preliminary yield test
1981-82	F11 Headrows
1982-83	F12 Yield Test
1983-84	F13 Increase Block 84-33

Several years of testing and observation have shown the variety to be genetically stable and uniform. Variants that are up to 12 cm taller may occur as .1 per cent.

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Coker (9733 )

EXHIBIT B

Novelty Statement

*most closely resembles*

'9733' ~~is more nearly like~~ Tyler, but differs in being resistant to mildew, leaf rust and stem rust as recorded on pages 20, 21, 22 and 23 of the 1986 SRRWW report.

*See as per  
Telephone call  
9/2/88*

8700159

POWDERY MILDEW

	EXPT GA	PLNS GA	TIFT GA	LAFY IN	WIND IN	OTWN MD	CLAY NC	TIDE NC	FLOR* SC	OVTN TX	WARS VA	CV MEAN
1 SALUDA	1.0	8.0	9.0	0.0	2.3	0.0	7.0	7.0	10.0	0.0	5.0	3.9
2 FL 302	0.0	0.0	0.0	MSG	1.0	0.0	2.0	2.0	10.0	0.0	0.0	0.6
3 T 70-302	0.0	0.0	1.0	MSG	4.0	0.0	3.0	4.0	10.0	1.0	1.0	1.6
4 TYLER	2.0	5.0	6.0	0.0	1.7	0.0	4.5	4.0	20.0	0.0	3.0	2.6
5 MD 55-217 63	0.0	0.0	0.0	0.0	1.0	1.0	1.5	3.0	0.0	0.0	0.0	0.7
6 MD 55-22-76	2.0	0.0	0.0	0.0	1.0	0.0	1.0	3.0	0.0	0.0	0.0	0.7
7 PIONEER EXP W9021L	1.0	0.0	0.0	0.0	4.0	0.0	4.5	2.0	0.5	0.0	2.0	1.4
8 MD 72004	0.0	0.0	2.0	0.0	1.0	0.0	4.5	2.0	0.5	0.0	1.0	1.1
9 NC 81-58	0.0	4.0	6.0	0.0	1.3	0.0	4.5	4.0	0.0	3.0	1.0	2.4
10 GA 781014-3	0.0	0.0	1.0	0.0	MSG	0.0	4.5	4.0	20.0	0.0	2.0	1.3
11 GA 73016-2	0.0	0.0	0.0	0.0	1.0	0.0	0.5	1.0	0.0	0.0	0.0	0.3
12 NA-SW76-59	5.0	7.0	5.0	3.0	4.7	1.0	8.5	5.0	20.0	3.0	3.0	4.5
13 FL 72185A101-5-9	0.0	0.0	0.0	MSG	1.0	1.0	2.5	1.0	0.0	0.0	1.0	0.7
14 FL 7927-621	0.0	0.0	0.0	MSG	1.0	0.0	0.5	1.0	0.5	0.0	0.0	0.3
15 FL 7924-D13-414	0.0	0.0	0.0	0.0	1.0	0.0	1.0	1.0	0.5	0.0	1.0	0.4
16 COKER 82-27	0.0	0.0	0.0	MSG	2.7	0.0	2.5	2.0	0.0	0.0	0.0	0.8
17 COKER 84-27	0.0	0.0	2.0	0.5	1.0	0.0	3.0	3.0	10.0	0.0	1.0	1.1
18 SC 810779	0.0	0.0	1.0	MSG	MSG	0.0	2.0	2.0	0.5	0.0	0.0	0.6
19 SC 810468	1.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	20.0	0.0	0.0	0.3
20 PS 840026	0.0	0.0	0.0	0.0	1.0	0.0	1.0	2.0	0.0	1.0	1.0	0.6
21 P9323 (COKER 83-23)	1.0	3.0	5.0	0.0	1.0	0.0	4.0	6.0	0.5	0.0	1.0	2.1
22 AR 116-6	5.0	9.0	8.0	2.0	5.3	0.0	5.0	9.0	0.0	5.0	4.0	5.2
23 AR 322-21-3	2.0	5.0	5.0	3.5	3.7	1.0	5.0	6.0	0.0	2.0	2.0	3.5
24 NA 9W77-42-25	0.0	1.0	2.0	2.0	4.7	0.0	2.5	4.0	0.5	4.0	0.0	2.0
25 COKER 84-33	0.0	0.0	0.0	0.0	1.0	0.0	0.5	1.0	10.0	0.0	0.0	0.3
26 COKER 85-43	0.0	6.0	5.0	0.0	1.0	0.0	5.0	3.0	0.5	2.0	1.0	2.3
27 VA 82-52-64	1.0	9.0	8.0	0.0	2.0	0.0	6.5	5.0	10.0	0.0	5.0	3.7
LOCATION MEAN	0.8	2.1	2.4	0.5	2.0	0.1	3.2	3.3	5.3	- 0.8	1.3	
GROWTH STAGE OR DATE		4/11		10.0		10.0	11.1	11.1	10.0			

\*Data from FLOR represents percent of the leaf area covered by mildew and is not included in the calculation of the CV MEAN.

DATA EXTRACTED FROM THE "1986 Uniform Southern Soft Red Winter Wheat Nursery Report" BY PERMISSION GRANTED BY THE APPLICANT.

LEAF RUST

8700159

	BALD AR	BAY AR	PLWS GA	TIFT GA	LAFY IN	QTMH MD	RAYD MS	CLAY NC	DALS* TX	DVTN TX	WARS VA	CV MEAN
1 SALLIDA	0.0	9.0	3.0	0.0	2.5	0.0	5.0	2.5	90 S	9.0	6.0	3.7
2 FL 302	0.0	1.0	3.0	1.0	0.3	0.0	0.0	2.0	5 MR	2.0	1.0	1.0
3 T 70-302	2.0	4.0	6.0	3.0	MSG	1.0	1.0	5.5	40 S	7.0	7.0	4.1
4 TYLER	8.0	9.0	6.0	5.0	7.5	2.0	2.0	7.5	100 S	8.0	8.0	6.3
5 MD 55-217 63	8.0	9.0	8.0	9.0	8.5	2.0	1.0	9.0	100 S	8.0	8.0	7.1
6 MD 55-22-76	8.0	9.0	9.0	9.0	8.0	4.0	1.0	9.0	100 S	8.0	8.0	7.3
7 PIONEER EXP W9021L	0.0	2.0	4.0	1.0	1.5	0.0	1.0	4.5	30 MS	3.0	6.0	2.3
8 MD 72004	0.0	7.0	5.0	0.0	7.5	1.0	1.0	2.0	MSG	7.0	6.0	3.7
9 NC 81-58	0.0	MSG	0.0	0.0	3.0	0.0	0.0	1.0	MSG	3.0	1.0	0.9
10 GA 781014-3	0.0	MSG	3.0	1.0	1.3	0.0	1.0	1.0	20 MS	4.0	1.0	1.4
11 GA 73016-2	0.0	MSG	0.0	0.0	1.0	0.0	1.0	0.5	MSG	2.0	1.0	0.6
12 WA-SW76-59	0.0	9.0	2.0	0.0	3.0	0.0	1.0	2.0	MSG	2.0	1.0	2.0
13 FL 72185A101-5-9	0.0	1.0	5.0	2.0	1.3	0.0	0.0	2.5	60 MS	6.0	2.0	2.0
14 FL 7927-621	0.0	0.0	0.0	0.0	MSG	0.0	0.0	0.5	10 MS	3.0	1.0	0.5
15 FL 7924-D13-414	0.0	1.0	0.0	0.0	1.3	0.0	1.0	1.5	60 S	4.0	3.0	1.2
16 COKER 82-27	0.0	0.0	1.0	0.0	2.3	0.0	1.0	1.5	10 MS	3.0	1.0	1.0
17 COKER 84-27	0.0	3.0	0.0	0.0	4.5	0.0	1.0	1.0	20 S	3.0	1.0	1.4
18 SC 810779	0.0	1.0	0.0	0.0	MSG	0.0	0.0	2.5	10 MR	2.0	3.0	0.9
19 SC 810468	0.0	3.0	0.0	0.0	0.5	0.0	0.0	1.0	20 MR	2.0	1.0	0.8
20 PS 840026	0.0	5.0	4.0	1.0	5.5	1.0	2.0	3.5	70 S	7.0	5.0	3.4
21 P9323 (COKER 83-23)	0.0	2.0	1.0	1.0	4.5	0.0	8.0	2.5	60 S	7.0	1.0	2.7
22 AR 116-6	0.0	3.0	1.0	0.0	4.3	0.0	3.0	3.0	20 S	7.0	4.0	2.5
23 AR 322-21-3	2.0	5.0	3.0	0.0	6.5	1.0	1.0	3.0	20 S	6.0	1.0	2.9
24 WA 9W77-42-25	0.0	4.0	4.0	0.0	5.5	1.0	3.0	3.5	30 MS	7.0	7.0	3.5
25 COKER 84-33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20 MR	2.0	1.0	0.3
26 COKER 85-43	0.0	4.0	0.0	0.0	2.0	0.0	3.0	1.0	30 S	6.0	2.0	1.8
27 VA B2-52-64	4.0	9.0	4.0	0.0	2.0	2.0	9.0	5.0	40 S	9.0	8.0	5.2

LOCATION MEAN 1.2 4.2 2.7 1.2 3.5 0.6 1.7 2.9 42 5.1 3.5  
GROWTH STAGE OR DATE 4/11 10.5 10.5 10.5 11.1

\*Data from DALS is percent leaf area infected and includes an infection type descriptor: S=susceptible; MS=moderately susceptible; and MR=moderately resistant. Data from DALS is not included in the CV MEAN.

DATA EXTRACTED FROM THE "1986 Uniform Southern Soft Red Winter Wheat Nursery Report" BY PERMISSION GRANTED BY THE APPLICANT.

5

STEM RUST

	LAFY IN	DAIS* TX
1 SALLUDA	7.0	70.0 S
2 FL 302	0.3	1.0 MR
3 T 70-302	MSG	50.0 S
4 TYLER	8.0	80.0 S
5 MD 55-217 63	7.3	20.0 MR
6 MD 55-22-76	3.3	10.0 MR
7 PIONEER EXP W9021L	0.5	0.0
8 MD 72004	5.0	MSG
9 NC 81-58	7.3	MSG
10 GA 781014-3	MSG	80.0 S
11 GA 73016-2	5.0	MSG
12 NA-SW76-59	8.0	MSG
13 FL 72185A101-5-9	MSG	1.0 MR
14 FL 7927-621	MSG	80.0 S
15 FL 7924-D13-414	0.3	10.0 MS
16 COKER 82-27	7.3	90.0 S
17 COKER 84-27	8.0	90.0 S
18 SC 810779	MSG	70.0 S
19 SC 810468	0.5	10.0 MR
20 PS 840026	8.0	30.0 S
21 P9323 (COKER 83-23)	6.0	50.0 S
22 AR 116-6	6.3	70.0 S
23 AR 322-21-3	8.5	90.0 S
24 NA 9W77-42-25	5.5	60.0 S
25 COKER 84-33	0.0	10.0 MR
26 COKER 85-43	7.5	70.0 S
27 VA 82-52-64	7.5	80.0 S
LOCATION MEAN	5.3	48.8
GROWTH STAGE	10.5	

\*Data from DAIS is percent leaf area infected and includes an infection type descriptor: S=susceptible; MS=moderately susceptible; and MR=moderately resistant. Trace found on MD 72004, NA-SW76-59, and Coker 82-27 at PLNS.

The accessions listed below were tested for reaction to leaf and stem rust by D. V. McVey of the Cereal Rust Lab, St. Paul, MN. The data is percent infection and infection types.

	LEAF RUST		STEM RUST
	Reading 1	Reading 2	
10 GA 781014-3	TS	20 MS-S	90 S
13 FL 72185A101-5-9	TS	20 MS-S	80 S
14 FL 7927-621	TS	20 MS-S	80 S
15 FL 7924-D13-414	TS	5 S	60 S
16 COKER 82-27	TS	5 R-MR	60 S
17 COKER 84-27	TS	5 R-MR	40 S
18 SC 810779	TMR	TMR	TR
19 SC 810468	TS	5 MS-S	5 MS
20 PS 840026	TS	40 MS-S	40 S
21 P9323 (COKER 83-23)	TS	40 MS-S	60 S
22 AR 116-6	10 S	40 S	80 S
23 AR 322-21-3	10 S	60 MS-S	80 S
24 NA 9W77-42-25	40 S	60 S	90 S
25 COKER 84-33	TMR	5 MS	10 MR-MS
26 COKER 85-43	TS	5 MS-S	30 S
27 VA 82-52-64	5 MS-S	10 MS-S	90 S



U. S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
LIVESTOCK, MEAT, GRAIN AND SEED DIVISION  
BELTSVILLE, MARYLAND 20785

EXHIBIT C  
(Wheat)

OBJECTIVE DESCRIPTION OF VARIETY  
WHEAT (TRITICUM SPP.)

INSTRUCTIONS: See Reverse.

NAME OF APPLICANT(S)

FOR OFFICIAL USE ONLY

Coker's Pedigreed Seed Company

PVPO NUMBER

ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)

8700159

P.O. Box 340

VARIETY NAME OR TEMPORARY DESIGNATION

Hartsville, South Carolina 29550

Place the appropriate number that describes the varietal character of this variety in the boxes below.

Place a zero in first box (e.g.     or   ) when number is either 99 or less or 9 or less.

## 1. KIND:

 1 = COMMON    2 = DURUM    3 = EMMER    4 = SPELT    5 = POLISH    6 = POULARD    7 = CLUB

## 2. TYPE:

 1 = SPRING    2 = WINTER    3 = OTHER (Specify) \_\_\_\_\_  1 = SOFT    3 = OTHER (Specify) \_\_\_\_\_  
 2 = HARD

 1 = WHITE    2 = RED    3 = OTHER (Specify) \_\_\_\_\_

## 3. SEASON - NUMBER OF DAYS FROM EMERGENCE TO:

   FIRST FLOWERING       LAST FLOWERING

## 4. MATURITY (50% Flowering):

  NO. OF DAYS EARLIER THAN .....  1 = ARTHUR    2 = SCOUT    3 = CHRIS 7=Tyler  
  NO. OF DAYS LATER THAN .....  4 = LEMHI    5 = NUGAINES    6 = LEEDS

## 5. PLANT HEIGHT (From soil level to top of head):

   CM. HIGH  
  CM. TALLER THAN .....   
  CM. SHORTER THAN .....  1 = ARTHUR    2 = SCOUT    3 = CHRIS 7=Tyler  
 4 = LEMHI    5 = NUGAINES    6 = LEEDS

## 6. PLANT COLOR AT BOOTING (See reverse):

 1 = YELLOW GREEN    2 = GREEN    3 = BLUE GREEN    RHS 147B

## 7. ANTHR COLOR:

 1 = YELLOW    2 = PURPLE

## 8. STEM:

 Anthocyanin: 1 = ABSENT    2 = PRESENT     Waxy bloom: 1 = ABSENT    2 = PRESENT  
 Hairiness of last internode of rachis: 1 = ABSENT    2 = PRESENT     Internodes: 1 = HOLLOW    2 = SOLID  
  NO. OF NODES (Originating from node above ground)      CM. INTERNODE LENGTH BETWEEN FLAG LEAF AND LEAF BELOW

## 9. AURICLES:

 Anthocyanin: 1 = ABSENT    2 = PRESENT     Hairiness: 1 = ABSENT    2 = PRESENT

## 10. LEAF:

 Flag leaf at booting stage: 1 = ERECT    2 = RECURVED     Flag leaf: 1 = NOT TWISTED    2 = TWISTED  
 3 = OTHER (Specify): \_\_\_\_\_  Waxy bloom of flag leaf sheath: 1 = ABSENT    2 = PRESENT  
 Hairs of first leaf sheath: 1 = ABSENT    2 = PRESENT  
  MM. LEAF WIDTH (First leaf below flag leaf)      CM. LEAF LENGTH (First leaf below flag leaf)

## 11. HEAD:

☒ 2 Density: 1 = LAX 2 = DENSE ☐ Shape: 1 = TAPERING 2 = STRAP 3 = CLAVATE 4 = OTHER (Specify) \_\_\_\_\_

☒ 2 Awnedness: 1 = AWNLESS 2 = APICALLY AWNLETED 3 = AWNLETED 4 = AWNEO

☒ 2 Color at maturity: 1 = WHITE 2 = YELLOW 3 = PINK 4 = RED 5 = BROWN 6 = BLACK 7 = OTHER (Specify) \_\_\_\_\_

☐ CM. LENGTH ☐ MM. WIDTH

## 12. GLUMES AT MATURITY:

☒ 3 Length: 1 = SHORT (CA. 7 mm.) 2 = MEDIUM (CA. 8 mm.) 3 = LONG (CA. 9 mm.) ☒ 3 Width: 1 = NARROW (CA. 3 mm.) 2 = MEDIUM (CA. 3.5 mm.) 3 = WIDE (CA. 4 mm.)

☒ 2 Shoulder shape: 1 = WANTING 2 = OBLIQUE 3 = ROUNDED 4 = SQUARE 5 = ELEVATED 6 = APICULATE ☒ 1 Beak: 1 = OBTUSE 2 = ACUTE 3 = ACUMINATE

## 13. COLEOPTILE COLOR:

☒ 2 1 = WHITE 2 = RED 3 = PURPLE

## 14. SEEDLING ANTHOCYANIN:

☐ 1 = ABSENT 2 = PRESENT

## 15. JUVENILE PLANT GROWTH HABIT:

☒ 2 1 = PROSTRATE 2 = SEMI-ERECT 3 = ERECT

## 16. SEED:

☒ 1 Shape: 1 = OVATE 2 = OVAL 3 = ELLIPTICAL ☒ 1 Cheek: 1 = ROUNDED 2 = ANGULAR

☒ 2 Brush: 1 = SHORT 2 = MEDIUM 3 = LONG ☐ Brush: 1 = NOT COLLARED 2 = COLLARED

☐ Phenol reaction (See instructions): 1 = IVORY 2 = FAWN 3 = LT. BROWN 4 = BROWN 5 = BLACK

☐ Color: 1 = WHITE 2 = AMBER 3 = RED 4 = PURPLE 5 = OTHER (Specify) RHS 164B

☐ 0 7 MM. LENGTH ☐ 0 3 MM. WIDTH ☐ 3 8 GM. PER 1000 SEEDS

## 17. SEED CREASE:

☒ 1 Width: 1 = 60% OR LESS OF KERNEL 'WINOKA' 2 = 80% OR LESS OF KERNEL 'CHRIS' 3 = NEARLY AS WIDE AS KERNEL 'LEMHI'

☒ 2 Depth: 1 = 20% OR LESS OF KERNEL 'SCOUT' 2 = 35% OR LESS OF KERNEL 'CHRIS' 3 = 50% OR LESS OF KERNEL 'LEMHI'

## 18. DISEASE: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

☒ 2 STEM RUST (Races) ☒ 2 LEAF RUST (Races) ☐ STRIPE RUST (Races) ☐ LOOSE SMUT

☒ 2 POWDERY MILDEW ☐ BUNT ☐ OTHER (Specify) \_\_\_\_\_

## 19. INSECT: (0 = Not Tested, 1 = Susceptible, 2 = Resistant)

☒ 0 SAWFLY ☒ 0 APHID (Bydv.) ☐ GREEN BUG ☐ CEREAL LEAF BEETLE

☐ OTHER (Specify) \_\_\_\_\_ HESSIAN FLY RACES: ☐ GP ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

## 20. INDICATE WHICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED:

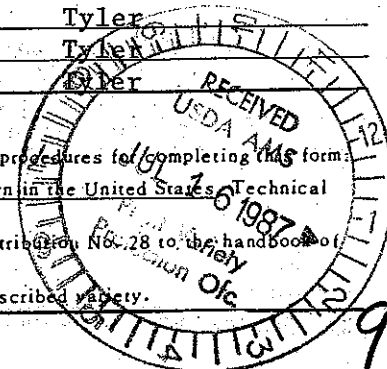
CHARACTER	NAME OF VARIETY	CHARACTER	NAME OF VARIETY
Plant tillering	Tyler	Seed size	Tyler
Leaf size	Tyler	Seed shape	Tyler
Leaf color	Tyler	Coleoptile elongation	Tyler
Leaf carriage	Tyler	Seedling pigmentation	Tyler

## INSTRUCTIONS

GENERAL: The following publications may be used as a reference aid for the standardization of terms and procedures for completing this form:

- (a) L.W. Briggles and L. P. Reitz, 1963, Classification of Triticum Species and Wheat Varieties Grown in the United States, Technical Bulletin 1278, United States Department of Agriculture.
- (b) W.E. Walls, 1965, A Standardized Phenol Method for Testing Wheat Seeds for Varietal Purity, contribution No. 28 to the handbook of seed testing prepared by the Association of Official Seed Analysts. (See attachment.)

LEAF COLOR: Nickerson's or any recognized color fan should be used to determine the leaf color of the described variety.



(Coker 9733 ) Wheat  
EXHIBIT D  
Additional Description of the Variety

Coker 9733 is a soft red winter wheat with a semi-decumbent growth habit. Plant color is similar to RHS 147B. Plant height has averaged about 87 cm or slightly taller than 'Tyler'.

Heads are rather long, mid-dense, apically awnleted with long upper internode that is up to 25 cm.

Resistant to leaf rust, stem rust and powdery mildew races prevalent during testing period.

Apparent areas of adaptation are the Southeastern Piedmont and Coastal Plain and the Mississippi Delta up to Northern Arkansas.

## EXHIBIT E

Statement of Applicant's Ownership

Coker's Pedigreed Seed Company, Hartsville, South Carolina, believes it is the sole, original and first breeder of the 'Coker 9733' variety of wheat for which it solicits a certificate of protection.

SOFT WHEAT ANALYSIS

TRIAL # 8549XY

1985 SKW

Bay, AR

( 2 of 5 )

Entry # 954901-9 thru 954909-9 Mill: Continental

ENTRY	ID NO	WHEAT		MILLING		FLOUR ANALYSIS		Cookie Diam	Hard ness	EVALUATION			REMARKS
		Bu WT.	Hard ness	Flour Yield	Ash	Prot.	Peak			Flour Yield	Stren	Cookie Bake	
		lb.	lb.	%	%	%	mic	cm.	ft	5	qth	All	
18		854722											
19		854723	67.0	1.47	36	9.4	52.4	1.15	50 FT	3.5		4.5	BM? PP CD?
20		854724	66.5	1.45	36	9.4	53.6	1.15		4.0		5.0	BM? PP CD?
21		854725	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
22		854726	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
23		854727	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
24		854728	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
25		854729	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
26		854730	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
27		854731	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
28		854732	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
29		854733	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
30		854734	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
31		854735	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
32		854736	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
33		854737	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
34		854738	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
35		854739	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
36		854740	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
37		854741	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
38		854742	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
39		854743	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
40		854744	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
41		854745	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
42		854746	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
43		854747	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
44		854748	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
45		854749	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
46		854750	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
47		854751	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
48		854752	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
49		854753	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
50		854754	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
51		854755	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
52		854756	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
53		854757	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
54		854758	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
55		854759	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
56		854760	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
57		854761	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
58		854762	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
59		854763	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
60		854764	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
61		854765	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
62		854766	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
63		854767	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
64		854768	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
65		854769	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
66		854770	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
67		854771	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
68		854772	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
69		854773	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
70		854774	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
71		854775	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
72		854776	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
73		854777	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
74		854778	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
75		854779	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
76		854780	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
77		854781	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
78		854782	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
79		854783	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
80		854784	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
81		854785	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
82		854786	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
83		854787	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
84		854788	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
85		854789	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
86		854790	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
87		854791	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
88		854792	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
89		854793	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
90		854794	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
91		854795	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
92		854796	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
93		854797	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
94		854798	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
95		854799	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
96		854800	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
97		854801	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
98		854802	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
99		854803	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?
100		854804	66.5	1.45	36	9.4	53.6	1.15		3.5		5.0	BM? PP CD?

8700159  
S - satisfactory  
According to  
R.K. Bagnato

ASSIGNMENT OF PLANT VARIETY PROTECTION CERTIFICATES

WHEREAS, COKER'S PEDIGREED SEED COMPANY, a South Carolina corporation ("Coker's"), having its offices at 900 Darlington Highway, Hartsville, South Carolina 29550, has adopted and used and is the sole and exclusive owner of certain United States Plant Variety Protection Certificates and similar rights under laws of countries other than the United States as listed in Exhibit A hereto:

WHEREAS, COKER'S PEDIGREED SEED CO. and NORTHRUP KING CO., a Delaware corporation ("NK"), have entered into an Asset Purchase Agreement, dated July 20, 1988, providing for the purchase and sale of substantially all of the assets and business of Coker's and the assumption of certain of Coker's liabilities and obligations by NK; and

WHEREAS, NK desires to acquire the right, title and interest in, to and under the Plant Variety Protection Certificates listed on Exhibit A hereto and the pending applications hereto (collectively, the "Plant Variety Protection Certificates").

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, Coker's hereby sells, assigns, transfers and sets over to NK the Plant Variety Protection Certificates. Coker's further agrees, at no cost to it, to execute and deliver to NK, upon the request of NK, any further instrument of assignment that may be necessary to effectuate the transfer of each Plant Variety Protection Certificate.

IN WITNESS WHEREOF, Coker's has caused this instrument to be executed by its duly authorized representative as of the 20th day of July, 1988.

**COKER'S PEDIGREED SEED COMPANY**

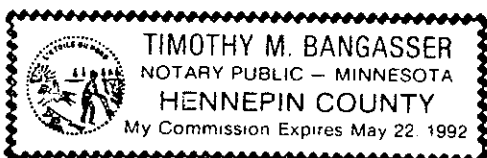
By:

E. Joe Dahmer  
President

STATE OF MINNESOTA )  
 ) ss:  
COUNTY OF HENNEPIN )

On this 26<sup>th</sup> day of July, 1988, before me, a Notary Public in and for the County aforesaid, the undersigned officer, E. Joe Dahmer, personally appeared and acknowledged himself to be the President of Coker's Pedigreed Seed Co., and that he executed the foregoing instrument for the purposes therein.

1988. WITNESS my hand and seal this 20<sup>th</sup> day of July,



Yvethy M. Bagnasser  
Notary Public

Cotton Varieties, Continued

8700159

<u>Variety Name</u>	<u>U.S. Plant Variety Certificate Number</u>	<u>Issue Date</u>	<u>Term (Yrs.)</u>
Coker 3131	8100019	Sept. 24, 1981	18
Coker 208	8300082	Sept. 29, 1983	18
Coker 139	8700070	Dec. 18, 1987	18

Soft Red Winter Wheat Varieties

Coker 68-15	7200014	Mar. 6, 1974	17
Coker 68-19	7200015	Mar. 6, 1975	17
Coker 747	76TQ015	Sept. 20, 1978	17
Coker 762	8000152	Dec. 10, 1981	18
Coker 797	8000145	Dec. 10, 1981	18
Coker 916	8300036	Sept. 27, 1985	18
Coker 983	8400058	Dec. 31, 1980	18
McNair 701	7200038	Feb. 26, 1974	17
McNair 4823	7200037	Apr. 8, 1975	17
RHS 8232	8400136	Oct. 31, 1985	18
9227	8600009	May 31, 1988	18
9323	8600010	Apr. 29, 1988	18
McNair 1813	7500006	May 1, 1975	17
McNair 1003	7700084	Aug. 10, 1978	17
Coker 833	8800005(1)	Oct. 2, 1987(1)	-
Coker 9733	8700159(1)	July 16, 1987(1)	-
Coker 9766	8700160(1)	July 17, 1987(1)	-

(1) Application number and filing date.